

# LEAN 101

**SIPOC**

## Lean 101 - SIPOC

### **SIPOC = Supplier, Inputs, Process, Outputs, Customers**

A SIPOC diagram\* is used to identify all the essential elements of a process before work begins to improve it. It can help you and your team members to define a complex project that might otherwise be intractable or difficult to scope out.

<b>Definitions of Terms</b>	
<b>Supplier</b>	The internal/external Suppliers of the Inputs required for the Process.
<b>Inputs/Specifications</b>	The Inputs -- such as materials, forms, information, etc. -- required for the Process to work properly, including any specifications for the Inputs.
<b>Process</b>	The activities, procedures, steps required to produce the Output.
<b>Outputs/Requirements</b>	What the Customer/Client wants/needs/has requested, including the specific requirements for each Output. It is what the process/unit produces. Requirements could include timing and frequency.
<b>Customers</b>	The internal/external Customers/Clients that will receive the Outputs of this Process.

\* based on the work of Edward Deming & Six Sigma

## **Applying a Process Mindset**

### **SIPOC Worksheet**

(Suppliers, Inputs, Process, Outputs, Customers)

**Purpose:** The purpose of this task is to identify and define the essential aspects of key primary and secondary processes in your worksite for use in your improvement activities.

**Task 1:** Name the primary and secondary processes in your work area that you're selecting for this Worksheet.

**Primary Process** –

**Secondary Processes** –

**Task 2:** Outline the steps in your selected primary and secondary process(es).

Do this at a fairly broad or high level (or go down to smaller discrete processes) so that you generally have 4 or 5 steps – but try to have no more than six.

**Task 3:** Complete the table below for your selected process(es).

This SIPOC table can be used to identify and diagram all the relevant elements of a process. This can be especially useful before work begins and can help you and your team members to define a complex project that may otherwise be difficult to scope out.

After you've first identified the broad steps in the process, it might be helpful to work backwards -- that is, start at the end by identifying who your customers are and the outputs they require, then the inputs needed to produce those, and finally who would supply those needed inputs.

## Example of SIPOC Diagram

<b>Process Name:</b> Repairing car hit in parking lot					
Car arrives at repair shop	Car inspected & insurer contacted	Parts ordered	Car repaired	Car inspected & test driven	Car turned over to owner

  

Suppliers	Inputs/Specifications	Process	Outputs/Requirements	Customers
Car Owner Car Parts Company	Damaged Car  Approval/Agreement from Insurer  Agreement from Car Owner for repairs  Car parts: <ul style="list-style-type: none"> <li>Must be brand-specific</li> </ul>	See Steps Above	Estimate of Work to be performed/ Paperwork to Insurer  Invoice to Insurer  Repaired Car: <ul style="list-style-type: none"> <li>All repairs completed as agreed.</li> <li>Car to be repaired within a week.</li> </ul> Car Owner sign-off.	Car Owner Insurance Company



**Process Name:**

➤➤➤➤➤

Suppliers	Inputs/Specifications	Process	Outputs/Requirements	Customers
		See Steps Above		



**Process Name:**

	>		>		>		>	
--	---	--	---	--	---	--	---	--

Suppliers	Inputs/Specifications	Process <i>See Steps Above</i>	Outputs/Requirements	Customers



Process Name:

	>		>		>		>	
--	---	--	---	--	---	--	---	--

Suppliers	Inputs/Specifications	Process	Outputs/Requirements	Customers
		See Steps Above		



Process Name:

	>		>		>		>	
--	---	--	---	--	---	--	---	--

Suppliers	Inputs/Specifications	Process	Outputs/Requirements	Customers
		See Steps Above		





Process Name:

	➤		➤		➤		➤		➤	
--	---	--	---	--	---	--	---	--	---	--

Suppliers	Inputs/Specifications	Process	Outputs/Requirements	Customers
		See Steps Above		



Process Name:

--	--	--	--	--	--

Suppliers	Inputs/Specifications	Process	Outputs/Requirements	Customers
		See Steps Above		

